

IN THE CLAIMS

Claims 1-6 (Canceled).

7. (New) A manufacturing system for assembling a plurality of different models of a product comprising:

a main conveyor defining a linear conveying path having first and second sides;

a plurality of cell conveyors disposed alongside at least one of the first and second sides and extending substantially parallel to the main conveyor, each cell conveyor defining an assembly line for finishing the assembling work for a respective one of the plurality of product models as the product models are conveyed on pallets along the respective cell conveyor, wherein the number of cell conveyors corresponds to the number of different product models, each cell conveyor including an output section through which the pallets are conveyed to the main conveyor, and

a pallet carrier disposed between the output section of each cell conveyor and the respective input section of the main conveyor for successively receiving and transferring the pallets on which the assembled product models are loaded from the output section of the respective cell conveyor to the respective input section of the main conveyor so that common works for the assembled product models can be accomplished on the main conveyor.

8. (New) The manufacturing system according to claim 7 wherein each pallet carrier includes:

a lifting conveyor including a first surface disposed at an output section of a respective cell conveyor and being elevatable for lifting a pallet from the cell conveyor, the first surface being movable in a direction oriented cross-wise with respect to a travel direction of the cell conveyor to shift the lifted pallet toward the main conveyor, and

a lowering conveyor including a second surface arranged at the input section of the main conveyor and adjacent the lifting conveyor, the second surface being movable in the same direction as the first surface for receiving a pallet from the lifting conveyor, the lowering conveyor being lowerable wherein the pallet is transferable to the input section of the main conveyor in response to the lowering of the lowering conveyor.

9. (New) The manufacturing system according to claim 7 wherein the main conveyor includes a downstream end where the product models are removed from the respective pallets, the system further including a return conveyor disposed beneath the main conveyor for returning pallets from the downstream end to pallet-transfer locations adjacent input sections of respective ones of the cell conveyors.

10. (New) The manufacturing system according to claim 9 further including a pallet input device disposed at respective ones of the pallet transfer locations for transferring pallets from the return conveyor to the input sections of respective cell conveyors, each pallet input device comprising:

an elevatable first unit conveyor for raising a pallet off the return conveyor,

an elevatable second unit conveyor arranged to be elevated simultaneously with the first unit conveyor and disposed next to the first unit conveyor for receiving the pallet from the first unit conveyor, and

a pallet supply conveyor arranged to receive the pallet from the second unit conveyor in response to relative vertical movement between the pallet supply conveyor and the second unit conveyor, the pallet supply conveyor arranged to transfer the pallet to the input section of the respective cell conveyor.

11. (New) The manufacturing system according to claim 7 further including reversing apparatuses each disposed adjacent the main conveyor at a location downstream of selected ones of the pallet carriers, the selected pallet carriers comprising the pallet carriers which transfer pallets from cell conveyors situated at the at least one of the first and second sides of the main conveyor, each reversing apparatus arranged to reverse pallets that are transferred to the main conveyor by the selected pallet carriers.